GRAPHTEC

Full Color Image Scanner
24-bit Color | 42" wide | s-RGB compatible

CS610-CS510

Full Color Image Scanner
8-bit Color | 42" wide

IS210 PRO

Monochrome Image Scanner
Monochrome | 42" wide

IS210

Full Color Image Scanner
24-bit Color | 36" wide | s-RGB compatible

CSX300

CS610 Series

CS510 Series

IS210 Series

CSX300-09

CS610 Series :	42" wide/full-color, for thick medium scanning
CS510 Series :	42" wide/full-color
IS210-11eN PRO :	42" wide/8bit-color
IS210-11eN :	42" wide/monochrome
CSX300-09 :	36" wide/full-color

42" scanners line-up is renewed.
9600 dpi interpolated resolution is added.
999 m long length scanning function is added with the Scanning Master 21+.
The CSX300-09 is added as a 36" full color scanner.
Convenient, reliable face-up document loading. Ease of use.

ENERGY STAR

State of the art scanning technology.
For GIS/CAD, Graphics, Reprographics and more.

36" Full Color Image Scanner

CSX300-09

36" wide | 9600 dpi | Full Color

42" Full Color Image Scanner
Scanning of thick documents

CS610-11eN PRO

42" wide | 9600 dpi | Full Color

CS610-11eN

42" wide | 800 dpi | Full Color

42" Full Color Image Scanner

CS510-11eN PRO

42" wide | 9600 dpi | Full Color

CS510-11eN

42" wide | 800 dpi | Full Color

42" 8-bit Color Image Scanner

IS210-11eN PRO

42" wide | 9600 dpi | 8-bit Color

42" Monochrome Image Scanner

IS210-11eN

42" wide | 800 dpi | Monochrome

※The CS610/CS510/IS210 series can be upgraded after an initial purchase. These services are the option plans in a distributor. Please ask the distributor for details.

600 dpi Optical Resolution
9600 dpi maximum interpolated resolution
(PRO models and CSX300)

Reduces a total scanning time by high-speed interfaces

USB2.0/Network Connectivity interfaces are supported.*1

Scanning Master 21+ Scanner Driver

Scan to File / Scan to Print / Scan to Viewer
Scan to PDF

Compact & Lightweight

±0.1% Scanning Accuracy

Scans thick medium up to 20.3 mm (0.8 inch)

Compatible with CS610 Series that supports the ITA (Intelligent Thickness Adjustment) feature to automatically detect the thickness of the medium being loaded

*1 CSX300 supports the USB interfaces only.

Graphtec Scanner comparison table

Model	Size	Scan mode		Speed *1		Interpolated resolution	Interface	Document thickness	Document reading surface	Applications
		Color	Gray scale	24bit Full color	Monochrome Bi-level					
CS610-11eN-PRO	B0 (42 inches)	24 bit full color	256 shades	29 s	8 s	9600 dpi	USB2.0 100BASE-TX	20 mm	Face down	●◆▲■
CS610-11eN	B0 (42 inches)	24 bit full color	256 shades	41 s	13 s	800 dpi	USB2.0 100BASE-TX	20 mm	Face down	●◆▲■
CS510-11eN-PRO	B0 (42 inches)	24 bit full color	256 shades	29 s	8 s	9600 dpi	USB2.0 100BASE-TX	1.5 mm	Face down	●◆▲■
CS510-11eN	B0 (42 inches)	24 bit full color	256 shades	41 s	13 s	800 dpi	USB2.0 100BASE-TX	1.5 mm	Face down	●◆▲■
CSX300-09	A0 (36 inches)	24 bit full color	256 shades	62 s	8 s	9600 dpi	USB2.0	1.5 mm	Face up	▲■
IS210-11eN-PRO	B0 (42 inches)	8 bit 256 color	256 shades	-	8 s	9600 dpi	USB2.0 100BASE-TX	1.5 mm	Face down	■
IS210-11eN	B0 (42 inches)	Mono-chrome	256 shades	-	13 s	800 dpi	USB2.0 100BASE-TX	1.5 mm	Face down	■

● Graphic arts, Reprographics, Photographics ◆ In-door posters, Copy shops ▲ Civil engineering, Surveying, Aerial photo, GIS ■ Architecture, Building construction, CAD

*1 The scan speed indicates the scanning time when scanning an A0 size document.
For the CS and IS series, the scan speed for PRO model is with the High speed scan mode, for standard model is with the Normal scan mode.
For the CSX300, the scan speed is with the High speed scan mode.

Specifications

		CS610-11eN PRO		CS510-11eN PRO		IS210-11eN PRO		CSX300-09
Document sizes		ANSI E to ISO A4						
Maximum scanning medium width		1,092 mm/43 inches (centered)						965 mm/38 inches (centered)
Effective scanning area	Width	1,066.8 mm/42 inches (centered)						932.2 mm/36.7 inches (centered)
	Length	999.999 m (maximum) *1						
Document thickness		20.3 mm/0.8 inches or less (including the carrier sheet)		1.5 mm (0.06 inches) or less (including the carrier sheet)				
Document thickness detection		Automatic detection by ITA		-				
Optical resolution		600 dpi						
Interpolated resolution (in 1 dpi increments)		50 to 9600 dpi	50 to 800 dpi	50 to 9600 dpi	50 to 800 dpi	50 to 9600 dpi	50 to 800 dpi	50 to 9600 dpi
Main scanning system		Contact image sensor system (five A4 sensors in a zigzag pattern)						
Sub scanning system		Document travel (sheet through) system						
Scanning speed*2								
When the document thickness is 1.5 mm/0.06 inches or less (400 dpi, ISO A0)								
High-speed scan	Monochrome	8s	-	8s	-	8s	-	8s
	Gray	16s	-	16s	-	16s	-	23s
	8bit Color	32s	-	32s	-	32s	-	-
	24bit color	29s	-	29s	-	-	-	62s
Normal scan	Monochrome	13s	13s	13s	13s	13s	13s	14s
	Gray	19s	19s	19s	19s	19s	19s	26s
	8bit Color	45s	45s	45s	45s	45s	-	-
	24bit color	41s	41s	41s	41s	-	-	75s
When the document thickness is 1.5 mm/0.06 inches to 20.32 mm/0.8 inches (400 dpi, ISO A0)								
High-speed scan	Monochrome	29s	-					
	Gray	29s	-					
	8bit Color	37s	-					
	24bit color	36s	-					
Normal scan	Monochrome	35s	35s					
	Gray	35s	35s					
	8bit Color	45s	45s					
	24bit color	41s	41s					
Scanning precision *3		+/-0.1%						
Gradation		Monochrome : Bilevel, intermediate tones (dithering, error diffusion) Gray: 256 shades						
		Color : 8-bit, 24-bit				Color: 8-bit	-	Color: 24-bit
Threshold value		Automatic threshold settings by DSP during monochrome mode						
Color space		s-RGB compatible					-	s-RGB compatible
Light source		LED (RGB)						
Interface		USB 2.0(High Speed), 10BASE-T/100BASE-TX						USB 2.0 (High speed)
Output		Image data						
Rated power supply		100 to 120/200 to 240 VAC +/-10%, 50/60 Hz						
Operating environment		Temperature: 10 deg.C to 35 deg.C; Humidity : 35% to 80% R.H. (non-condensing)						
Power consumption *4		60W or less (6.3W or less in power save mode)		60W or less (5W or less in power save mode)				Max: 60W or less, Stand-by: 30W or less, Power save: 5W or less (*2), (*3)
External dimensions (approx.) 【W×H×D】		1,205 × 957 × 690 mm/47.4 × 37.7 × 27.1 inches) (including stand)						1,095 × 163 × 324 mm 43.2 × 6.3 × 12.7 inches
Weight (approx.)		47 kg (including stand)		38 kg (including stand)		38 kg (including stand)		Unit: 25 kg, Stand (Option): 13 kg (approx.)
Conforming standard		UL, FCC class A (USA), CE mark (EU), ccc, EK mark						
Operating system (OS)		Windows Vista, Windows XP Professional, Windows XP Home Edition, Windows 2000 Professional						

*1 The maximum length of 999m can be set at the ScanningMaster21+. But actual scanning length varies depending on the specification of PC and the condition of scanned document.The scanning of the long length is out of the guarantee.
*2 Including data transfer time Scanning system requirements (Scanning speed may decrease depending on PC specifications)
CPU : Pentium4 3.2GHz or higher ; Memory : 1 GB or more ; Interface : USB2.0
*3 Notes on scanning precision
Scanning precision may vary slightly depending on the grad eand thickness of the medium being scanned, and on the operating conditions. The precision figures above were measured under the operating conditions described below.
Test chart used: Mylar sheet #200
Guaranteed precision conditions: Temperature 20 +/- 3 deg.C ; Humidity 60% +/- 10% R.H.
Guaranteed scanning precision range: Width : 1,066.8mm ; Length : 1,508.7mm ; Thickness : 1.5mm or less
Scanning precision at 1 meter length
*4 Power save mode is set when the document is not loaded and not operated more than 13 minutes
Power save mode is canceled when document is loaded

Options / Other accessories

Item	Model
Stand for CS510/610/IS210 series	ST0075
Stand for CSX300-09	ST0074
Software to upgrade the Scanning Master 21+ to the Scanning Master Pro Color	OPS115-KIT
Carrier sheet A0	IS0922
Carrier sheet A1	IS0908
Cleaning paper	EM-CP
Calibration / Color correction sheets for CS510/610/ IS210PRO	IS0917
Calibration / Color correction sheets for IS210	IS0918
Calibration sheet (Black & White calibration) for CSX300	IS0925
Calibration sheet (for thick document) for CS610	IS0926

Standard accessories

	CS510/610/IS210 series	CSX300-09
Power cable	1	1
USB interface cable		1
Calibration / Color correction sheets (CS510/610/IS210 PRO : IS0917, IS210 : IS0918)	1 set	
Calibration sheet (IS0925, Black & White calibration)		1 set
Carrier sheet (IS0922)	1	1
CD-ROM (User manual, Scanning Master 21+, Twain driver)	1	1
Quick start guide		1
Document support unit (CS610 sereis)	1	
Document support wires	3	
Document support plate		1 set
Cleaning paper	1	1

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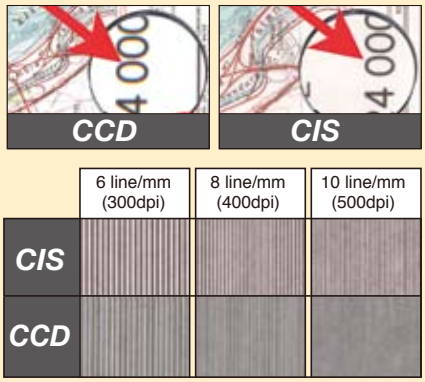
CIS vs CCD scanner

CIS : Contact Image Sensor Method
CCD : Magnification Optical Method

All Graphtec scanners currently use the CIS sensor system, ensuring sharp, crisp and clear image reproduction. This technical advantage is further reinforced by a very accurate paper feed and hold technology. Even deep wrinkles on paper can be smoothed to provide optimal image reproduction. Graphtec scanners provide stunning high-resolution images compared to other products in the market. Graphtec scanners (CS610/510/CSX300) achieve a wider color gamut using the CIS method instead of the older CCD method. (CS610/510/CSX300) can produce high levels of precision and accuracy, as well as a high Optical Resolution of 600dpi. These are truly state-of-the-art scanners that not only meet the needs of industries requiring precise images such as civil engineering drawings, city planning drawings and apparel paper patterns, but also satisfy the needs of the graphic arts and printing industries.

Corona Effect

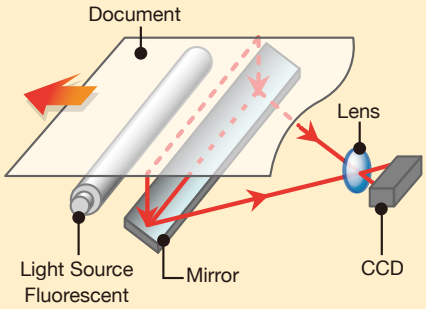


What is the CIS (Contact Image Sensor) method used in the image scanner?

Image scanners can use one of two methods to scan documents—CIS or CCD. Graphtec employs the leading-edge CIS method for optical systems in its scanners. Enabling extremely high-resolution and high-accuracy input with large-format scanners, the CIS (Contact Image Sensor) method is a state-of-the-art scanning technology that uses contact image sensors developed solely by Graphtec.

CCD method (optical reduction method)

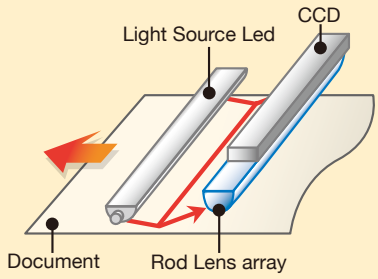
Light from the light source is reflected by the document's surface. This reflected light is reflected further by a mirror, directed through a lens, and received by the CCD. Since the CCD reads light reduced by the lens, this method is called the "optical reduction method".



CIS method (contact image sensor method)

The light from the three RGB color LEDs used as light source are reflected by the document. This reflected light is received in turn by the CIS sensor, which performs the actual scanning. The LEDs, lens, and sensor are integrated into a single module. Since these components are all rods of the same length in close contact, this method is called the "contact image sensor" method. This is the method used by Graphtec.

This method is ideal for markets that require precision for applications such as civil engineering survey drawings, urban planning drawings, and apparel patterns.



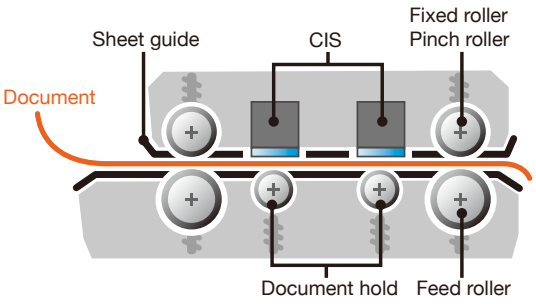
Feature of the CIS method

Method	CCD method	CIS method	GRAPHTEC CIS method	
Image quality	○	○	◎	The CIS method provides sharp images with minimal blurring.
Warm-up time	×	◎	◎	The CIS method requires no start-up time, allowing immediate use of the scanner.
Power consumption	×	○	◎	New Scanner: Provides a power-saving mode (5 W or less).
Compact dimensions	×	◎	◎	New Scanner: A redesign has resulted in a compact, lightweight scanner unit.

◎:Excellent, ○:Good, ×:Poor

CSX300-09 Face up scanning system

Convenient, reliable face-up document loading even easier to use
The drawings and documents you want to convert into electronic format are loaded face-up, allowing you to monitor the actual scanned area you want to convert into electronic format.



A mechanism supporting the underside of the document enhances document feed reliability.

Scans thick medium up to 20.3 mm (0.8 inch)

CS610 Series supports the ITA (Intelligent Thickness Adjustment) feature, allowing for scanning of thick medium up to 20.3 mm (0.8 inch). To load a medium using the ITA feature while automatically detecting its thickness, first press the ITA button to activate the function. Then gently push the top edge of the medium against the top cover, which allows the cover to rise up. After loading the medium, the cover closes to place it in position.

Supports a mechanism that can "Iron out" the wrinkles on paper and ensure reliable paper feeding

CS 610/510 and IS210 adopt a new paper pressure feeding mechanism, which helps smooth out even the badly wrinkled paper and ensure optimal image reproduction. Thick medium can be securely held to guarantee correct feeding, resulting in accurate scanning.

Equipped with sliding paper guides with a right-left balancing function

All series now have as standard the sliding paper guides with a right-left balancing function, a very useful mechanism when loading medium, and has proved very popular among many users.

Scanning Master 21+

Converting drawings into electronic format

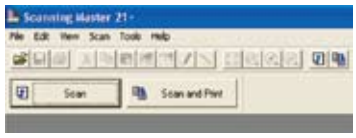
Versatile “Scanning Master 21+” driver software enables a range of scanner and data operations

Software provided with the scanner

The Scanning Master 21+ software for scanners provides a wide range of features, including a powerful backup solution for those using scanners. This software converts scanned data into digital data and offers simple data editing and correction functions. Specify scan settings for specific needs.

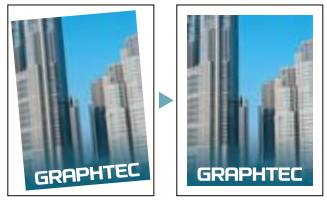
Simple copy function

Offers an integral Scan-to-Print function. After scanning the document, you can have scanned data printed automatically via the Windows driver.



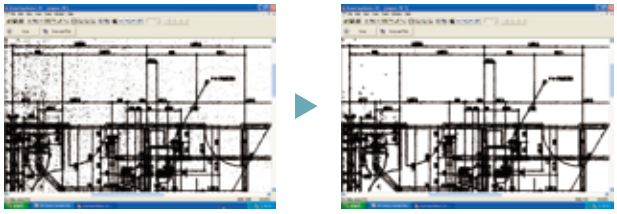
Automatic deskewing

Skewed documents fed into the scanner are automatically deskewed for skews of up to ±7.1°. Available for grayscale, 256-bit color, and full-color data as well as bilevel data.



Automatic despeckling function

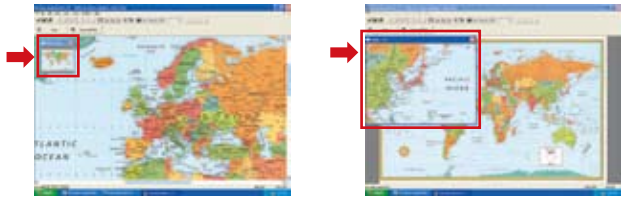
Automatically removes speckles as the document is scanned. Any speckles below the specified pixel level are removed for monochrome data. For grayscale and color data, the software applies an averaging function to match surrounding colors.



Entire drawing/Detailed drawing function

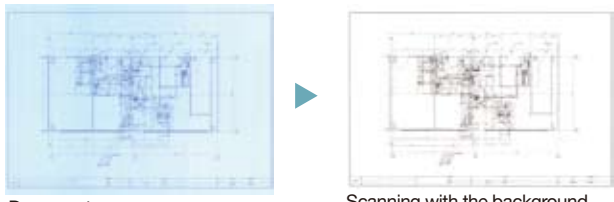
Entire drawing
Displays the entire image in a separate window. This function lets you confirm which part of the image to display.

Detailed drawing
Displays a detailed drawing of the image displayed at the current cursor position in a separate window.



Lets you make scan settings/document-specific scan settings

You can set scanning conditions suitable for different document types (e.g., maps, drawings, or blueprints) in advance to enable easy selection of the most appropriate scanning environment. Moreover, these conditions can be edited and new scanning conditions added and stored.



Document

Scanning with the background suppressed

Suppressing the background color

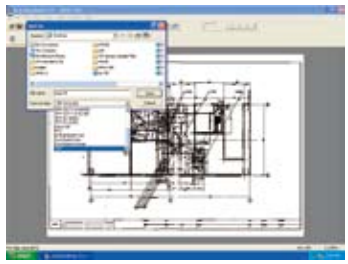
To enable scanning, you can adjust White point, Crease reduction threshold level, and Crease reduction intensity values to turn the background of the tracing paper or mylar film white.

Continuous scanning function

Press the scanner Scan key on the main body to enable continuous scanning. File names are automatically numbered and saved sequentially.

Saving scanned data as PDF files

Select the appropriate command from the File menu to save scanned data in PDF file format. This feature enables various data management and application methods.



Scanning Master Pro Color

Editing

Raster editing and simple filing functions "Scanning Master Pro Color" scanner software

8-bit and 24-bit colorization and editing of monochrome data
Fast editing—even of full-color data

Enhanced with various editing functions, Scanning Master Pro Color is Scanning Master 21+ software for scanners. Featuring a comprehensive set of correction functions, color/text/selected range editing functions, and data management functions that facilitate information sharing, this versatile software is used with GIS and CALS/EC editing applications.

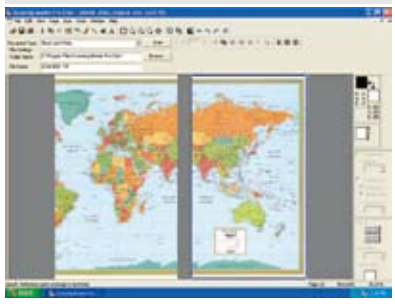
Easy data correction

Despeckling, deskewing, 4-point correction, and linking multiple sheets of data are just a few of the various correction functions required after scanning color or monochrome data. All are easily handled by Scanning Master Pro Color.

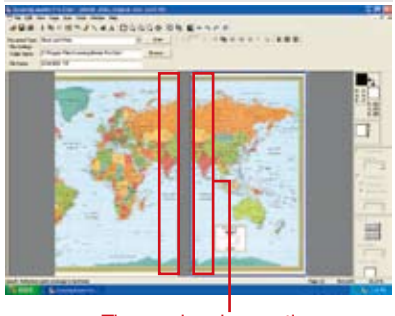
Linking drawings

Lets you link tiled data such as roads or maps.

Start the linking procedure.

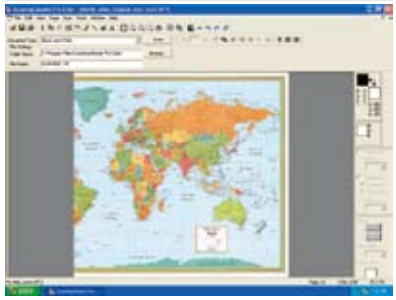


Specify the points to be linked.



The overlapping sections are automatically deleted.

After linking



4-point correction

Automatically corrects distorted drawings.

Full data editing capabilities for easy data correction and erasure

Enables color consistency based on the colors in the original data and enables extracting partial data and editing data, while the broad range of text tools makes it easy to process drawings. Together, these tools make it easy to draft urban planning drawings or hazard maps.

Color editing

Lets you convert colors into monochrome or reduce the number of colors.

Fill

Lets you color data using graduated color, set translucent colors, or add frames.

Text input

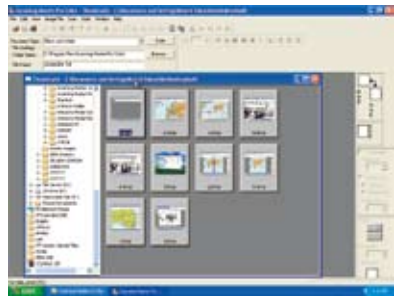
In addition to standard text input, this function lets you insert text along rivers or roads.

Easy data management and sharing

The tree and thumbnail view data management system supports various formats and lets you confirm file locations at a glance, facilitating sharing of scanned and/or edited data among various applications. Also includes a comprehensive search function.

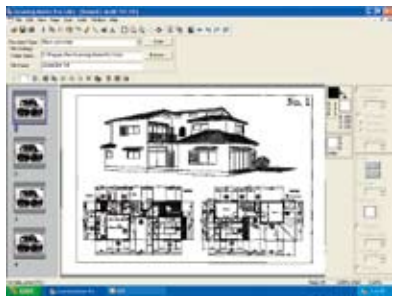
Tree and thumbnail view management system

Eases data replacement and copying/cutting tasks.



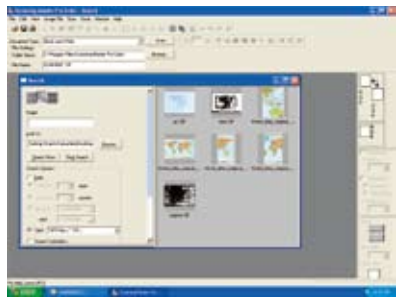
Viewer function

Lets you check contents via the thumbnail viewer. Enables viewing of multi-page TIFF files.



File search

Lets you search with various search parameters while viewing thumbnails.



Note : 1. Compatible OS : Windows 2000 Professional, Windows XP Home Edition, Windows XP Professional (Professional x64 Edition cannot be used)
2. For CS610/510/IS210 and CSX300, it is necessary to scan using the Twain driver.